

Brain abscess was the cause of death in 2 of these cases, meningitis in 3, and disease of the lungs in 3, in 2 of which were found thrombus of the lateral sinus, and in 1 the sinus was normal.

Of the 52 cases which were relieved, 3 showed signs of disease of the lungs, in 2 of which the mischief was diagnosticated before the operation; 36 of the 52 were cured within one year, that is, the discharge from the ear had ceased, whereas 9 still had a discharge at the end of one year, and 7 were lost sight of. That the discharge still continues in a very large number of cases is, in the opinion of Dr. Bronner, due to the fact that the after-treatment is so frequently neglected.—*British Medical Journal*, vol. ii., 1893.

SYMPTOMS AND TREATMENT OF THE SEPTIC INFECTION OF THE LATERAL SINUS, AS ILLUSTRATED BY TEN CASES.

MR. W. ARBUTHNOT LANE, in the Section of Otolgy of the British Medical Association, presented a paper based on ten cases of septic infection of the lateral sinus on which he had operated. In every case the suppurative disease of the ear was the origin of the infection of the sinus. Fourteen very interesting conclusions follow, which want of space obliges us to omit.—*British Medical Journal*, vol. ii., 1893.

THE TREATMENT OF OTITIC BRAIN ABSCESS.

KRETSCHMANN (*Münchener medizinische Wochenschrift*, 40. Jahrgang, No. 29) gives an account of two cases of otitic brain abscess. The first was of special interest because of its occurrence in consequence of an acute suppuration of the middle ear. On account of the absence of characteristic symptoms the abscess was not discovered until the autopsy.

The other abscess of the brain developed in connection with a chronic suppuration of the middle ear and was cured by operation.

DISCUSSION ON THE SURGICAL TREATMENT OF MASTOID DISEASE AND ITS COMPLICATIONS.

THE above-named discussion was conducted in the Section of Otolgy of the British Medical Association at its meeting in Newcastle-on-Tyne. The discussion was opened by PROF. MACEWEN, of Glasgow, who said that the title of the subject for discussion meant the extension of middle-ear disease to the mastoid region, and that it included for the most part infective disease of the middle ear, and excluded tubercle and carcinoma. He further said that he had found that the greater majority of these diseases travelled from the middle ear to the mastoid antrum and cells, after that invading the mucous membrane, the bone, the dura mater, and membranes of the brain. In many instances, after erosion of the bone, masses of granulation tissue extruded themselves upon the dura mater, which, on removal, promoted re-infection by a fresh surface coming in contact with the infective material pent up in the middle ear. In infective purulent disease of the middle ear the mastoid, antrum, and the mastoid cells ought to be thoroughly ablated. As a rule, after opening the antrum the attic of the middle ear was exposed by enlarging and opening the osseous parts in front. After exposing the

attic, the ossicles are to be removed, and the whole of the granulation tissue of the middle ear cleared out. After this the tegmen of the attic should be scrutinized by efficient light, and if eroded fully opened up, the granulation tissue removed from the dura mater and the brain laid bare, and if necessary opened into. He then spoke of further treatment of brain abscess and of disease of the sigmoid sinus and infective thrombus of this sinus.

MR. VICTOR HORSLEY said that his experience of such cases coincided with almost every point Prof. Macewen had advanced. He said the most important question among those that he would consider, at least as far as the interests of the patient were immediately concerned when the case was one of simple otitis media purulenta, was the question as to how long effort was to be made by ordinary antiseptic treatment to get the cavity to heal up before the surgical operation of clearing the tympanum and mastoid was undertaken. He suggested that one year would be the limit, and that if the discharge had not subsided, and if cicatrization did not occur within that period, the antrum of the mastoid should be laid open and the opening continued into the tympanum so as to make one space of both cavities. In this way, he suggested, the grave risks to life of persistent discharge from the ear, such as blood-poisoning, destruction of the bone, thrombus of the sinuses, inflammation of the membranes of the brain, and cerebral abscess could be avoided.

MR. HUGH E. JONES, of Liverpool, then considered a method of determining the condition of the mastoid before operating. He said that in the vast majority of cases the tuning-fork was heard best when placed over the small depression, called by Prof. Macewen the supra-meatal triangle, which existed just below the posterior zygomatic ridge and a little above and behind the bony osseous meatus. In a few cases the sound appeared to be nearly equal over the whole mastoid, but at the upper and posterior margins well defined. In one such case, in which the sound was unusually well conducted, on opening the mastoid it was found to consist of one large cavity which was filled by cholesteatomatous masses. The same auscultatory result was obtained in another case of cholesteatoma of the meatus and tympanum. In cases in which the sound was diffused, but not unusually loud, or perhaps less loud than usual, he had found a diploëtic or sclerosed mastoid with a small deep-seated antrum.

DR. WILLIAM HILL in his remarks said that in most of the specimens which he presented, the postero-supra-meatal triangle with its pit could be well seen, and when this portion of the bone was removed, as in some of the bones shown, the antrum was found at a variable depth beneath. He thought the term, mastoid antrum, a misnomer, because the antrum was bounded above and externally by the squamosal bone, anteriorly by the petrous bone and inferiorly only by the mastoid portion of the petro-mastoid bone. The term temporal antrum appeared to be free from objection.

DR. WILLIAM ROBERTSON gave as his opinion that chronic discharges from the ear favored infection, which might lead to invasion of important structures lying close at hand. He agreed with Prof. Horsley that one year should be the limit of antiseptic treatment for the cure of chronic otitis media purulenta.

MR. RUSHTON PARKER, of Liverpool, advocated the routine use of car-

bolized glycerin, one in twenty, as suggested to him by Mr. Lowe, of Bath, in preference to antiseptic injections which could not act thoroughly before the mastoid opening was made and tended to drive inward, without removing, septic agents and products confined in the bony cavity.

DR. WILLIAM MILLIGAN, of Manchester, advocated opening the tympanic attic, and its exploration in cases of chronic suppurative middle-ear disease at the same time that the antrum was opened. The attic offers such an admirable space for the production and propagation of septic material that it should be the surgeon's aim to clear it thoroughly of all its putrid contents.—*British Medical Journal*, vol. ii., 1893.

[So true is this that it is highly probable that many cases of antro-mastoid suppuration could be prevented by an early removal of diseased ossicles in chronic suppuration of the middle ear, especially of the attic.—REP.]

THE TREATMENT OF ENCEPHALIC ABSCESES CONSECUTIVE TO SUPPURATION OF THE EAR.

A. BROCA (*Gazette hebdomadaire de Médecine et de Chirurgie*, Année xl., No. 38) under this title gives a general review of this subject from the time of Lebert down to the present time. After considering at some length the opinions of Barker, Stoker, Bergmann, Hare, J. Lloyd, Macewen, MacBride and Miller, Chauvel, Gull and Sutton, Krishaber, Pitt, and others, he says: "Being given a chronic suppurative otitis media, accompanied with cerebral symptoms not well determinable if there is a mastoid fistula or symptoms of mastoiditis, it is necessary to perform generous trepanation of the mastoid and of the tympanic cavity. The same thing should be done even when the mastoid region appears normal externally, for sometimes an unsuspected retention of pus will be found in it which causes the symptoms, and also because, if it is necessary to go further, the mastoid path is the best way of proceeding."

OSTEOPLASTIC OPERATIONS ON THE SKULL, WITH REPORT OF A CASE OF CEREBRAL ABSCESS FOLLOWING OTITIS MEDIA CURED BY OPERATION.

DR. BRENTANO, in *Allgemeine medicinische Central-Zeitung*, No. 26, gives an account of a brain-abscess in a patient who had suffered from otorrhœa since childhood. Lately, following a cessation of the discharge, headache, constriction of the head, stiff neck, irregular pulse, somnolence, and tenderness of the occiput manifested themselves. The mastoid process was opened, and its cells found to be in a state of suppuration. After removal of the pus the dura was exposed and found to be black in color at the upper part of the cavity. As only temporary improvement occurred, another endeavor was made to find the suspected abscess beneath the discolored dura mater. At this point an abscess was discovered and emptied. Undisturbed recovery then took place.

TREPANATION FOR ABSCESS OF THE BRAIN.

TERRILLON communicates the history of a case of trepanation undertaken or relief of an intra-cranial abscess consecutive to chronic suppuration of the ear. The operation was performed eighteen months before it was reported,